REMARKS

In this Response, Applicants amend page 1 of the specification to include a reference to related co-pending applications, amend claims 1 and 5, and traverse the Examiner's rejections. Amendments to the claims should not be construed as acquiescence to any of the rejections. Rather, amendments to the claims are being made solely to expedite prosecution of the instant application. Further, silence with regard to any of the Examiner's rejections should not be construed as acquiescence to any of the rejections. Specifically, silence with regard to any of the rejections of the dependent claims that depend from an independent claim considered by Applicants to be allowable based on the Amendment and/or Remarks provided herein should not be construed as acquiescence to any of the rejections. Rather, silence should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to the independent claim from which the dependent claims depend. Applicants reserve the option to further prosecute the same or similar claims in the instant or a subsequent application. Upon entry of the Amendment, claims 1-28 are pending in the instant application.

Claim Amendments

Applicants amend claims 1 and 5 to include terminology consistent with claims 2-4 and 6-28. Support for the claim amendments can be found throughout the originally filed disclosure. The claim amendments thus do not provide any new matter.

Claim Rejections

The Examiner rejected claims 1, 5-9, 12-19, 22, and 24-28 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,758,359 to Saxon (hereinafter referred to as "Saxon") and further in view of U.S. Patent No. 6,038,665 to Bolt et al. (hereinafter referred to as "Bolt").

The Examiner also rejected claims 2-4, 10, 11, 20, and 21 under 35 U.S.C. § 103(a) as being unpatentable over Saxon and further in view of U.S. Patent No. 6,023,709 to Anglin et al. (hereinafter referred to as "Anglin").

Applicants' Response to Claim Rejections

Applicants have considered the Examiner's rejections of the claimed subject matter as provided in the present and previously issued Office Actions.

Applicants note that a prima facie case of obviousness requires a suggestion to combine, a reasonable expectation of success, and a teaching of all claim features. (MPEP § 2173.)

Upon review, Applicants maintain that the Examiner has not established a prima facie case of obviousness at least because the combination of Saxon and Bolt fails to teach all claim features. Specifically, Applicants maintain that neither Saxon nor Bolt teaches the feature of Applicants' claims directed to *detecting a condition representative of a data storage element having reached capacity*. Moreover, Applicants maintain that neither Saxon not Bolt teaches the feature of Applicants' claims directed to *storing data on a data storage element associated with an earliest time of storage*.

Claims 1-5

Applicants' independent claim 1 is directed to a process for storing data. Among other things, claim 1 includes providing a long term memory device having a plurality of data storage elements; *detecting a condition representative of each data storage element having reached capacity*; and, *based on the condition, directing a processor to compare time signals for each data storage element to store data on the data storage element having the earliest recorded data.*

The Examiner stated that the Saxon "maximum size threshold indicates a maximum size (capacity of the storage medium) that the save set at the schedule level must not exceed." Applicants respectfully disagree with this characterization.

Saxon describes a system for retroactively backing up data files. Saxon backs up data files by comparing a total size with a user-specified "maximum size threshold" to determine whether the back up may be performed. (Saxon col. 7, ll. 41-50 and Fig. 3b.) Saxon specifically states that the maximum size threshold is "the maximum amount of data that can be backed up *in the allotted backup time.*" (Saxon col. 7, ll. 25-27.) Saxon's method is therefore based on backup time, rather than backup space. While Applicants provide a basis for such characterization of Saxon through references to Saxon in the present and previous Response, the Examiner, in contrast, has not identified any reference to Saxon to support the Examiner's

assertion that Saxon's method or maximum size threshold is based on a storage capacity of the Saxon storage medium.

Since the Saxon maximum size threshold does not represent the storage capacity of the Saxon storage medium, Saxon does not detect a condition representative of the storage capacity of the storage medium. Since Saxon does not detect the condition, Saxon cannot direct, based on detecting the condition, a processor to compare time signals. Accordingly, Saxon does not teach the features of Applicants' independent claim 1 directed to *detecting a condition representative of each storage element having reached capacity* and, *based on the condition, directing the processor to compare the time signals for each data storage element having the earliest recorded data.*

Furthermore, as provided below, regardless of the meaning of the Saxon maximum size threshold, Saxon still does not teach the feature of Applicants' claim 1 that includes *directing a processor to compare time signals for each data storage element to store data on the data storage element having the earliest recorded data.*

The Examiner stated that "the method of Saxon proceeds in reverse timestamp order, beginning with the timestamp of the most recent save set as the current timestamp. The total size is compared to the maximum size threshold to determine if the total size is less than or equal to the maximum size threshold. Saxon's teaching shows that processor is comparing with respect to timestamp to determining the maximum size threshold based on condition." (Office Action, Item 2.) The Examiner also stated that Saxon teaches "directing the processor to compare the time signals for each data storage element to store data on the data storage elements having the earliest recorded data (column 5, lines 39-45)." (Office Action, Item 3.) Applicants respectfully disagree with these characterizations.

Saxon compares the timestamps associated with the save sets (Col. 7, ll. 3.7-39). Saxon does not use this comparison to store data on the data storage element having the earliest stored data. Rather, Saxon uses this comparison to eliminate save sets until the total size is less than a size that can be stored in the alloted time (i.e., the maximum size threshold). Moreover, Saxon does not store data on the data storage element having the earliest stored data. Regardless of the meaning of the Saxon maximum size threshold, therefore, Saxon does not teach the feature of Applicants' independent claim 1 that includes *directing a processor to compare time signals for*

each data storage element to store data on the data storage element having the earliest recorded data.

Bolt describes a system for backing up files over a wide area network. As indicated in Bolt col. 13, ll. 24-41 and as shown in Bolt Fig. 9, Bolt uses a limited amount of available storage capacity for back up storage. Upon reaching the back up storage limit, Bolt suspends the back up process until additional storage space becomes available by re-transmitting the blocks that are to be backed up and deleting the previous back up copies. Bolt does not make additional storage space available by comparing time signals for data storage elements. Rather, Bolt deletes previous back up copies regardless of their time of recording. Bolt also does not store data on the data storage element having the earliest recorded data upon reaching the storage limit. Accordingly, Bolt does not teach the feature of Applicants' independent claim 1 that includes *directing the processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data.*

Accordingly, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature of Applicants' independent claim 1 directed to *directing the processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data.* Applicants therefore consider independent claim 1 to be allowable.

Since claims 2-5 depend from claim 1, Applicants also consider claims 2-5 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claims 2-5. Applicants' failure to respond to the Examiner's rejections of dependent claims 2-5 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 1.

Claims 6-11

Applicants' independent claim 6 is directed to a method of storing data. Among other things, independent claim 6 includes detecting a condition representing a storage capacity of at least one of at least two data storage elements; and, based on the detected condition, *storing the data on the data storage element associated with an earliest time of storage.*

As previously provided herein with respect to claims 1-5, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature of *directing a processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data.* Accordingly, Applicants consider independent claim 6 to be allowable.

Since claims 7-11 depend from independent claim 6, Applicants also consider claims 7-11 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claims 7-11. Applicants' failure to respond to the Examiner's rejections of dependent claims 7-11 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 6.

Claims 12-16

Applicants' independent claim 12 is directed to a method of storing data. Among other things, independent claim 12 includes detecting a condition representing a storage capacity of at least one of at least two data storage elements; based on the detected condition, determining whether at least one of the at least two data storage elements includes available capacity; and, based on whether at least one of the at least two data storage elements includes available capacity, *storing the data on the data storage element associated with an earliest time of storage.*

As previously provided herein with respect to claims 1-5, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature of *directing a processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data.* Accordingly, Applicants consider independent claim 12 to be allowable.

Since claims 13-16 depend from independent claim 12, Applicants also consider claims 13-16 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claims 13-16. Applicants' failure to respond to the Examiner's rejections of dependent claims 13-16 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by

the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 12.

Claims 19-21

Applicants' independent claim 19 is directed to a processor program for storing data. Among other things, independent claim 19 includes instructions operable to cause a processor to detect a condition representing a storage capacity of at least one of at least two data storage elements; and, based on the detected condition, *store the data on the data storage element associated with an earliest time of storage.*

As previously provided herein with respect to claims 1-5, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature of *directing a processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data.* Accordingly, Applicants consider independent claim 19 to be allowable.

Since claims 20 and 21 depend from independent claim 19, Applicants also consider claims 20-21 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claims 20 and 21. Applicants' failure to respond to the Examiner's rejections of dependent claims 20 and 21 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 19.

Claims 22-25

Applicants' independent claim 22 is directed to a processor program for storing data. Among other things, independent claim 22 includes instructions operable to cause a processor to detect a condition representing a storage capacity of at least one of at least two data storage elements; based on the detected condition, determine whether at least one of the at least two data storage elements includes available capacity; and, based on whether at least one of the at least two data storage elements includes available capacity, *store the data on the data storage element associated with an earliest time of storage.*

As previously provided herein with respect to claims 1-5, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature of *directing a processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data*. Accordingly, Applicants consider independent claim 22 to be allowable.

Since claims 23-25 depend from independent claim 22, Applicants also consider claims 23-25 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claims 23-25. Applicants' failure to respond to the Examiner's rejections of dependent claims 23-25 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 22.

Claims 17 and 18

Applicants' independent claim 17 is directed to a method of storing data. Among other things, independent claim 17 includes *detecting a condition representing a storage capacity for at least one of at least two data storage elements*; and, *based on the detected condition, determining whether at least one of the at least two data storage elements includes available capacity*.

As previously provided herein with respect to claims 1-5, Saxon does not detect a condition representative of a storage capacity of a data storage element. Since Saxon does not detect the condition, Saxon cannot determine, based on detecting the condition, whether at least one of at least two data storage elements includes available capacity. Accordingly, Saxon does not teach the features of independent claim 17 that recite *detecting a condition representing a storage capacity for at least one of at least two data storage elements*; and, *based on the detected condition, determining whether at least one of the at least two data storage elements includes available capacity*.

As previously provided herein with respect to claims 1-5, Bolt describes a system that uses a limited amount of available storage capacity for back up storage. Upon reaching the back up storage limit, Bolt suspends the back up process until additional storage space becomes available by re-transmitting the blocks that are to be backed up and deleting the previous back up

copies. Bolt does not contain any description directed to determining, upon reaching the back up storage limit, whether another data storage element includes available capacity. Accordingly, Bolt does not teach the feature of independent claim 17 directed to *based on the detected condition, determining whether at least one of the at least two data storage elements includes available capacity.*

Accordingly, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature of independent claim 17 directed to *based on the detected condition, determining whether at least one of the at least two data storage elements includes available capacity*. Accordingly, Applicants consider independent claim 17 to be allowable.

Since claim 18 depends from independent claim 17, Applicants also consider claim 18 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claim 18. Applicants' failure to respond to the Examiner's rejections of dependent claim 18 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 17.

Claims 27 and 28

Applicants' independent claim 27 is directed to a processor program for storing data. Among other things, independent claim 27 includes instructions operable to cause a processor to *detect a condition representing a storage capacity of at least one of at least two data storage elements*; and, *based on the detected condition, determine whether at least one of the at least two data storage elements includes available capacity.*

As previously provided herein with respect to claims 17 and 18, neither Saxon nor Bolt, whether considered separately or in combination, teaches the feature directed to *based on the detected condition, determining whether at least one of the at least two data storage elements includes available capacity*. Accordingly, Applicants consider independent claim 27 to be allowable.

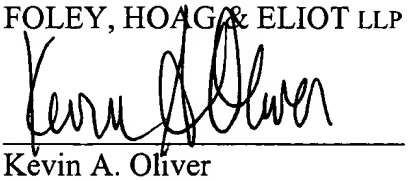
Since claim 28 depends from independent claim 27, Applicants also consider claim 28 to be allowable as depending on an allowable base claim, thereby mooting the Examiner's rejections of claim 28. Applicants' failure to respond to the Examiner's rejections of dependent

claim 28 should not be construed as acquiescence to any of the rejections. Rather, Applicants' failure to respond to the Examiner's rejections should be construed as recognition by the Applicants that the previously lodged rejections are moot based on the Amendment and/or Remarks submitted by the Applicants relative to independent claim 27.

CONCLUSION

Based on the foregoing Amendment and Remarks, Applicants respectfully submit that this application is in condition for allowance. Accordingly, Applicants request allowance. Applicants invite the Examiner to contact the Applicants' undersigned Attorney if any issues are deemed to remain prior to allowance.

Respectfully submitted,
FOLEY, HOAG & ELIOT LLP



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MARKED-UP VERSION OF SPECIFICATION

The following paragraph was inserted on page 1, line 2 of the specification:

Reference to Related Applications

This application is related to co-pending U.S. Patent Application Nos. 09/465,408, 09/465,411, 09/465,435, and 09/465,485, all filed on December 16, 1999. This application is also related to co-pending U.S. Patent Application No. 10/152,060 filed on May 21, 2002, which is a continuation application of U.S. Patent Application No. 09/465,485.

MARKED-UP VERSION OF CLAIMS

Claims 1 and 5 were amended as follows.

1. (Twice Amended) A process for storing data, comprising

providing a back up server having storage for a plurality of data files,

providing a long term memory device having a plurality of data storage elements and a processor for coordinating the operation of the plural data storage elements,

directing the processor to store data on the data storage elements and for recording a time signal representative of the time of recording data,

detecting a condition representative of each data storage element having reached capacity, and

based on the condition, directing the processor to compare the time signals for each data storage element to store data on the data storage element having the earliest recorded data.

5. (Twice Amended) A process according to claim 1, wherein directing the processor to store data on the data storage elements includes directing the processor to store data on each data storage element until each data storage element reaches capacity.